

NO. 96

AWS D17.1.2001
QUALIFICATION TEST RECORD

Name Barclay Elliott
Joint Welding Procedure Tig
Part number and Job number D350636013 / B30120

TEST WELDS REQUIRED

BASE METAL Alum WELDING PROCESS Tig
Penetration Complete ☐ Partial ☒ Single Weld ☒ Double Weld ☐
Current AC ☒ DC ☐ Backing YES ☐ NO ☒

| | Position | Vertical | Down <input type="checkbox"/> | Up <input type="checkbox"/> |
|--------------|-----------------------------|-----------------------------|-------------------------------|-----------------------------|
| Sheet Groove | 1G <input type="checkbox"/> | 2G <input type="checkbox"/> | 3G <input type="checkbox"/> | 4G <input type="checkbox"/> |
| Tube Groove | 1G <input type="checkbox"/> | 2G <input type="checkbox"/> | 5G <input type="checkbox"/> | 6G <input type="checkbox"/> |
| Sheet Fillet | 1F <input type="checkbox"/> | 2F <input type="checkbox"/> | 3F <input type="checkbox"/> | 4F <input type="checkbox"/> |
| Tube Fillet | 1F <input type="checkbox"/> | 2F <input type="checkbox"/> | 4F <input type="checkbox"/> | 5F <input type="checkbox"/> |

Crossbolt Spacer Welded into Skidtube

TEST RESULTS

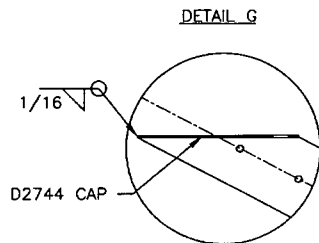
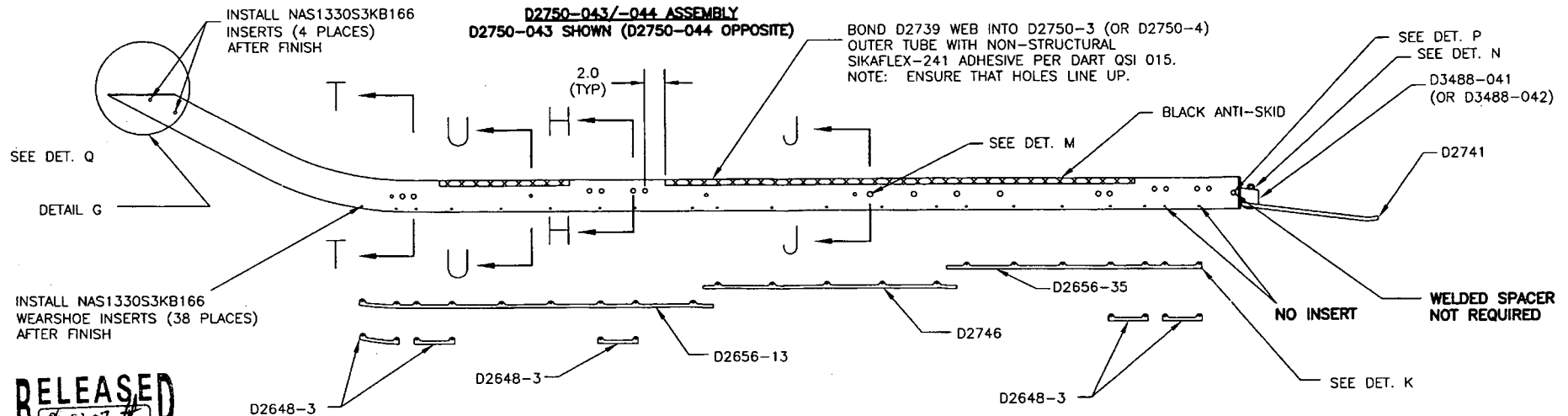
Visual Pass ☒ Fail ☐
Penetration Pass ☒ Fail ☐
Crossbolt Spacer Pass ☒ Fail ☐

The above named individual is qualified in accordance with AWS D17.1.2001 to weld

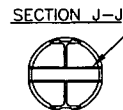
Date of Test Coupon 07/03/05 Qualifier David Haval

D2750-043/-044 ASSEMBLY
D2750-043 SHOWN (D2750-044 OPPOSITE)

BOND D2739 WEB INTO D2750-3 (OR D2750-4)
 OUTER TUBE WITH NON-STRUCTURAL
 SIKAFLEX-241 ADHESIVE PER DART QSI 015.
 NOTE: ENSURE THAT HOLES LINE UP.



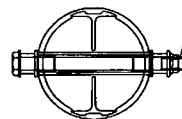
SECTION H-H D2743 SPACER (REF)



WELDING INSTRUCTIONS

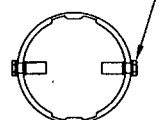
1. CHAMFER HOLE 0.050 X 45°
2. INSERT D2743 SPACER
3. WELD INTO PLACE
4. GRIND FLUSH
5. DRILL OUT SPACER TO Ø0.484
6. SPOT FACE Ø0.750 (SECTION J-J ONLY)

DETAIL M



- AN6C44A BOLT (1)
 D2745 BUSHING (2)
 NAS1515H8L WASHER (2)
 MS21043-6 NUT (1)
 (4 PLACES)
NOTE: INSTALL WASHER BETWEEN SKIDTUBE AND BUSHING

DETAIL Q



- AN3C6A BOLT (1)
 AN960C10L WASHER (1)
 NAS1515H3L WASHER (1)
 (4 PLACES)

SECTION T-T



D3492-041 PLUG ASSEMBLY

SECTION U-U

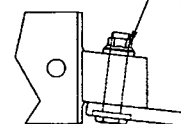


D3492-045 PLUG ASSEMBLY

WELDING INSTRUCTIONS

1. CHAMFER HOLE 0.050 X 45°
2. INSERT D3490-5 SPACER (4 PLACES) INTO Ø0.313 HOLES OR INSERT D3490-1 SPACER (4 PLACES) INTO Ø0.500 HOLES
3. WELD INTO PLACE
4. GRIND FLUSH
5. INSERT D3492-045 PLUG ASSEMBLY (8 PLACES) INTO D3490-5 SPACER OR INSERT D3492-041 PLUG ASSEMBLY (8 PLACES) INTO D3490-1 SPACER ON BOTH ENDS

DETAIL N



- AN8C21A BOLT (1)
 AN960JD816L WASHER (1)
 NAS1515H8L WASHER (1)
 MS21083C8 NUT (1)
 (2 PLACES)

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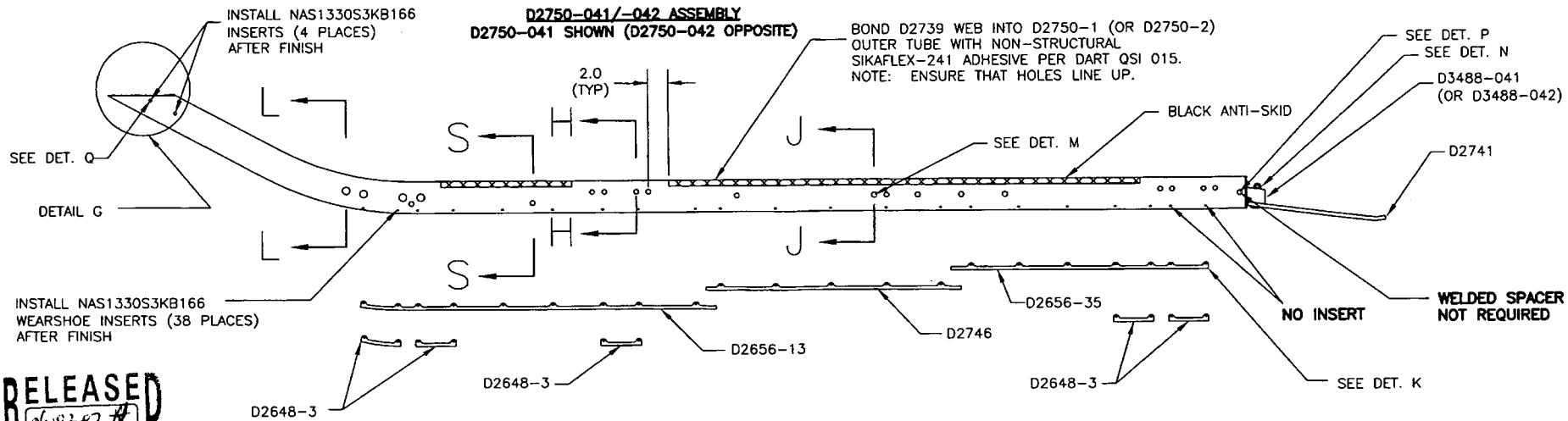
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| DATE 06.01.05 | TITLE 350 SKIDTUBE ASSEMBLY | SCALE 1:20 | |

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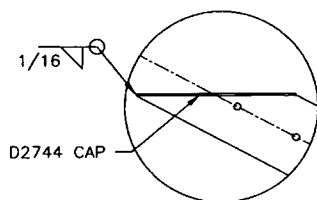
D2750-041/-042 ASSEMBLY
D2750-041 SHOWN (D2750-042 OPPOSITE)

BOND D2739 WEB INTO D2750-1 (OR D2750-2)
 OUTER TUBE WITH NON-STRUCTURAL
 SIKAFLEX-241 ADHESIVE PER DART QSI 015.
 NOTE: ENSURE THAT HOLES LINE UP.



RELEASED
 06-02-07 #

DETAIL G



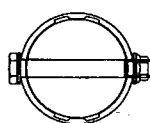
DETAIL K



USE AN3C7A BOLTS
 FOR INSTALLING AFT
 D2648-3 WEARPAD
 (4 PLACES)

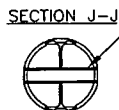
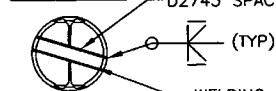
AN3C5A BOLT (1)
 AN960JD10L WASHER (1)
 NAS1515H3L WASHER (1)
 (38 PLACES)

DETAIL P



AN8C35A BOLT (1)
 AN960C816L WASHER (2)
 NAS1515H8L WASHER (2)
 MS21083C8 NUT (1)

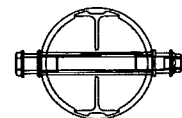
SECTION H-H



WELDING INSTRUCTIONS

1. CHAMFER HOLE 0.050 X 45°
2. INSERT D2743 SPACER
3. WELD INTO PLACE
4. GRIND FLUSH
5. DRILL OUT SPACER TO Ø0.484
6. SPOT FACE Ø0.750 (SECTION J-J ONLY)

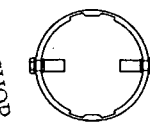
DETAIL M



AN6-44A BOLT (1)
 D2745 BUSHING (2)
 NAS1515H8L WASHER (2)
 MS21043-6 NUT (1)
 (4 PLACES)

NOTE: INSTALL WASHER BETWEEN
 SKIDTUBE AND BUSHING

DETAIL Q



AN3C6A BOLT (1)
 AN960C10L WASHER (1)
 NAS1515H3L WASHER (1)
 (4 PLACES)

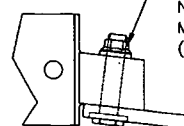
SECTION L-L



Ø0.750 HOLES ONLY

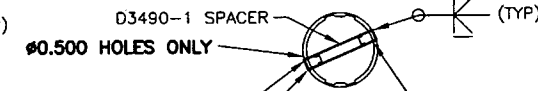
D3492-043 PLUG ASSEMBLY

DETAIL N



AN8C21A BOLT (1)
 AN960JD816L WASHER (1)
 NAS1515H8L WASHER (1)
 MS21083C8 NUT (1)
 (2 PLACES)

SECTION S-S



Ø0.500 HOLES ONLY

D3492-041 PLUG ASSEMBLY

WELDING INSTRUCTIONS

1. CHAMFER HOLE 0.050 X 45°
2. INSERT D3490-1 SPACER (4 PLACES) INTO Ø0.500 HOLES OR INSERT D3490-3 SPACER (4 PLACES) INTO Ø0.750 HOLES
3. WELD INTO PLACE
4. GRIND FLUSH
5. INSERT D3492-041 PLUG ASSEMBLY (8 PLACES) INTO D3490-1 SPACER OR INSERT D3492-043 PLUG ASSEMBLY (8 PLACES) INTO D3490-3 SPACER ON BOTH ENDS

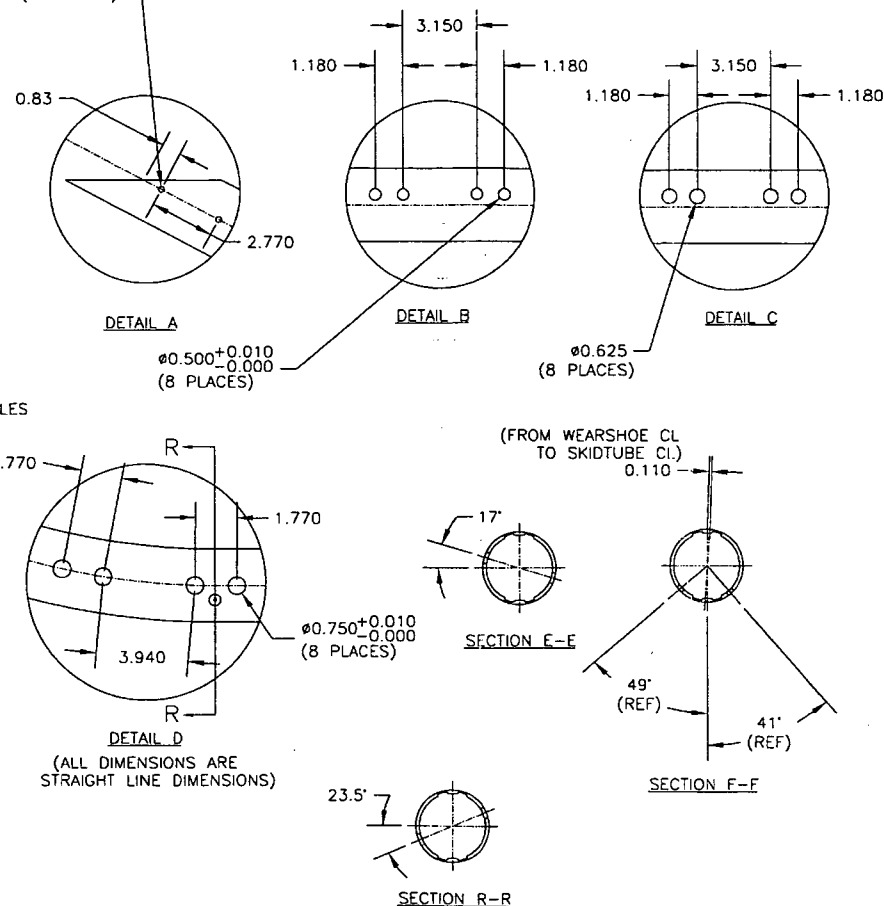
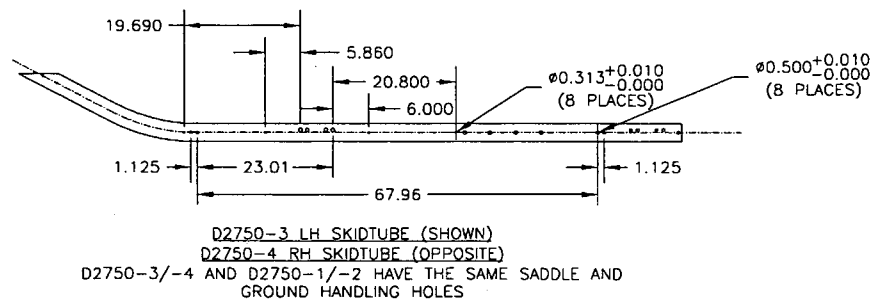
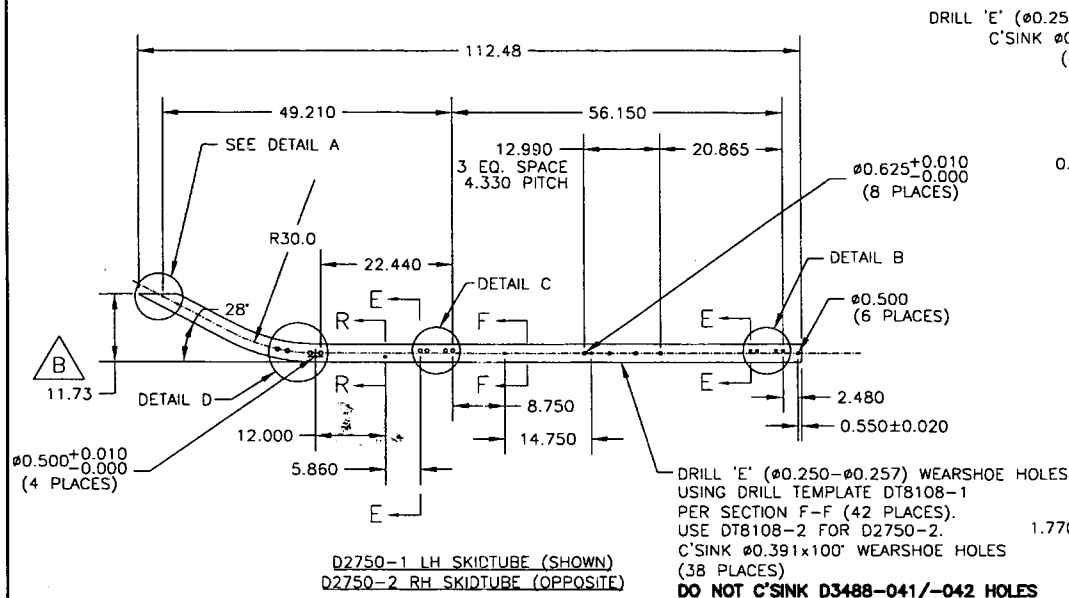
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| | | | SCALE 1:20 | | |

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| DATE 06.01.05 | | TITLE 350 SKIDTUBE ASSEMBLY | SCALE NTS |

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06.02.07

GENERAL NOTES:

1. ALL DIMENSIONS ARE IN INCHES
2. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
3. MAKE FROM D2600-3 EXTRUSION (INITIAL LENGTH = 120.0).
4. DAMAGE TOLERANCE ON BENDING:
THERE SHOULD BE NO VISIBLE WRINKLES IN THE BEND FROM THE GROUND TO A HEIGHT OF 12 INCHES ABOVE THE GROUND. NO GOUGING IS ACCEPTABLE IN THE FLAT PORTION OF THE TUBE. GOUGES UP TO 0.020 ARE ACCEPTABLE IN THE BENT PORTION OF THE TUBE. TUBE O.D. SHOULD BE 3.150 ± 0.010 IN THE FLAT PORTION OF THE TUBE. TUBE O.D. SHOULD BE 3.15 ± 0.030 IN THE BENT PORTION OF THE TUBE.
5. ALL HOLES DRILLED ON CENTERLINES EXCEPT THOSE NOTED BY SECTIONS E-E, F-F, AND R-R.
6. WELDING TO BE DONE PER DART QSI 004.
7. FINAL CONFIGURATION SHOULD HAVE THE FOLLOWING MINIMUM MECHANICAL PROPERTIES:
MINIMUM YIELD TENSILE STRENGTH = 35 ksi
MINIMUM ULTIMATE TENSILE STRENGTH = 38 ksi
8. FINISH:
ACID ETCH, ALODINE ASSEMBLY PER DART QSI 005 4.1 PRIOR TO INSTALLING D2739 WEB.
POWDER COAT WHITE (REF. 4.3.5.1) PER DART QSI 005 4.3
BLACK ANTI-SKID PAINT AS INDICATED TO 1.0 ABOVE SKIDTUBE CENTER-LINE PER DART 005 4.4 (OPTIONAL).
9. INSTALL NAS1330S3KB166 INSERTS AFTER FINISH AS INDICATED IN D2750-1/-2/-3/-4 WELDING DETAIL ON PAGE 4 AND 5. DRILL 'E' SIZE HOLES ($\emptyset 0.250$ - $\emptyset 0.257$) FOR WEARSHOE INSERTS. C'SINK $\emptyset 0.391 \times 100^\circ$ AND INSTALL INSERTS
10. D3488-041 (OR D3488-042) BLADE FITTING AND AN3-5A/AN3-7A WEARSHOE SCREWS TO BE INSTALLED USING SIKAFLEX-241 (OR EQUIVALENT) SEALANT.
11. SPRAY INSIDE OF TUBE WITH A COAT OF LPS LABORATORIES "LPS-3" AFTER FINISH AND AFTER INSTALLATION OF INSERTS. COAT ALL EXPOSED FASTENERS WITH LPS LABORATORIES "LPS PROCYON" AFTER FINAL ASSEMBLY, CLEAN EXCESS OFF POWDER COATING WITH MEK DEGREASER.
12. APPLY A LAYER OF SIKAFLEX -241/-291 ADHESIVE BETWEEN THE BOTTOM OF THE SKIDTUBE ASSEMBLY AND THE WEARPLATES

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| CHECKED <i>[Signature]</i> | APPROVED <i>[Signature]</i> | DRAWING NO. D2750 | REV. D SHEET 1 OF 5 |
| DATE 06.01.05 | | TITLE 350 SKIDTUBE ASSEMBLY | SCALE NTS |
| A | 98.04.16 | NEW ISSUE | |
| B | 98.09.01 | CHANGE MS24694-S293 TO AN8-16A | |
| C | 98.11.18 | ADD D2750-3/D2750-4 INCORPORATE D2738 AND D2740 | |
| D | 06.01.05 | ADD HOLES AND SPACERS FOR APICAL FLOATS INCORPORATE DEO 9133/9157 | |

RELEASED
06.02.07 *[Signature]*

| Qty -041 | Qty -042 | Qty -043 | Qty -044 | Part Number | Description |
|-------------|-------------|-------------|-------------|----------------|-----------------------|
| X | | | | D2750-041 | SKIDTUBE ASSEMBLY, LH |
| | X | | | D2750-042 | SKIDTUBE ASSEMBLY, RH |
| | | X | | D2750-043 | SKIDTUBE ASSEMBLY, LH |
| | | | X | D2750-044 | SKIDTUBE ASSEMBLY, RH |
| 5 | 5 | 5 | 5 | D2648-3 | WEARPAD |
| 1 | 1 | 1 | 1 | D2656-13 | WEARSHOE |
| 1 | 1 | 1 | 1 | D2656-35 | WEARSHOE |
| 1 | 1 | 1 | 1 | D2746 | WEARSHOE |
| 1 | 1 | 1 | 1 | D2739 | WEB |
| 1 | 1 | 1 | 1 | D2741 | BLADE |
| 8 | 8 | 8 | 8 | D2743 | SPACER |
| 1 | 1 | 1 | 1 | D2744 | CAP |
| 8 | 8 | 8 | 8 | D2745 | BUSHING |
| 1 | | | | D2750-1 | SKIDTUBE WELDMENT, LH |
| | 1 | | | D2750-2 | SKIDTUBE WELDMENT, RH |
| | | 1 | | D2750-3 | SKIDTUBE WELDMENT, LH |
| | | | 1 | D2750-4 | SKIDTUBE WELDMENT, RH |
| 1 | | 1 | | D3488-041 | BLADE FITTING, LH |
| | 1 | | 1 | D3488-042 | BLADE FITTING, RH |
| 4 | 4 | 4 | 4 | D3490-1 | SPACER |
| 4 | 4 | | | D3490-3 | SPACER |
| | | 4 | 4 | D3490-5 | SPACER |
| 8 | 8 | 8 | 8 | D3492-041 | PLUG ASSEMBLY |
| 8 | 8 | | | D3492-043 | PLUG ASSEMBLY |
| | | 8 | 8 | D3492-045 | PLUG ASSEMBLY |
| 38 | 38 | 38 | 38 | AN3C5A | BOLT |
| 4 | 4 | 4 | 4 | AN3C6A | BOLT |
| 4 | 4 | 4 | 4 | AN3C7A | BOLT |
| 4 | 4 | 4 | 4 | AN6C44A | BOLT |
| 2 | 2 | 2 | 2 | AN8C21A | BOLT |
| 1 | 1 | 1 | 1 | AN8C35A | BOLT |
| 46 | 46 | 46 | 46 | AN960C10L | WASHER |
| 4 | 4 | 4 | 4 | AN960C816L | WASHER |
| 4 | 4 | 4 | 4 | MS21043-6 | NUT |
| 3 | 3 | 3 | 3 | MS21083C8 | NUT |
| 42 | 42 | 42 | 42 | NAS1330S3KB166 | INSERT |
| 46 | 46 | 46 | 46 | NAS1515H3L | WASHER |
| 12 | 12 | 12 | 12 | NAS1515H8L | WASHER |

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| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Date: Wednesday, 1/31/2007 2:58:22 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY RH

Job Number: 30536

Part Number: D350636012

Job Number:



Seq. #:

Machine Or Operation:

Description :

48.0

D34931

WASHER



Comment: Qty.: 2 Each(s)/Unit Total : 2 Each(s)
WASHER

629798 ✓

49.0

D35321

spacer



Comment: Qty.: 2 Each(s)/Unit Total : 2 Each(s)
spacer

627894 ✓

6/27/03/27 (1)

50.0

QC4

INSPECT 100% KITS FOR COMPLETENESS



Comment: INSPECT 100% KITS FOR COMPLETENESS

u 57-03.27
6/27/03/27 (1)

51.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1
Package as per PPP D350-636-012

NUF 6/27/03/27

52.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

(1)
6/27/03/29

Job Completion



u 57-03-29

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: ☒ Date: 07/03/29

QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY RH

Job Number: 30536

Part Number: D350636012

Job Number:



Seq. #:

Machine Or Operation:

Description :

41.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

1/27/03/260

42.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Packing Kit

43.0

D2741

Blade



Comment: Qty.: 1 Each(s)/Unit Total : 1 Each(s)

Blade

Batch: 0298684 ✓

✓

44.0

AN960C816L

WASHER



Comment: Qty.: 2 Each(s)/Unit Total : 2 Each(s)

Washer

Batch: 11100186 ✓

✓

45.0

MS21083C8

NUT



Comment: Qty.: 2 Each(s)/Unit Total : 2 Each(s)

Nut

Batch: 11100186 ✓

✓

46.0

AN8C21A

BOLT



Comment: Qty.: 2 Each(s)/Unit Total : 2 Each(s)

Bolt

Batch: 1103544 ✓

✓

47.0

NAS1515H8L

WASHER



Comment: Qty.: 2 Each(s)/Unit Total : 2 Each(s)

WASHER

Batch: 1102515 ✓

✓

1/27/03/270

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Date: Wednesday, 1/31/2007 2:58:21 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY RH

Job Number: 30536

Part Number: D350636012

Job Number:



Seq. #:

Machine Or Operation:

Description :

36.0

MS210436

NUT



Comment: Qty.: 4 Each(s)/Unit Total : 4 Each(s)

NUT

Batch: m102532

37.0

MS21083C8

NUT



Comment: Qty.: 1 Each(s)/Unit Total : 1 Each(s)

NUT

Batch: m103492

38.0

NAS1515H3L

WASHER



Comment: Qty.: 46 Each(s)/Unit Total : 46 Each(s)

WASHER

Batch: m103641

39.0

NAS1515H8L

WASHER



Comment: Qty.: 10 Each(s)/Unit Total : 10 Each(s)

WASHER

Batch: m102515

FH/a.m 07/03/22 ①

40.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

1-Inspect for Foreign Objects

2-Spray inside of tube with "LPS-3"

batch: m103582

3-Install blade fitting D3488-042, wearshoes and ground handling hardware as per dwg D2750

SIKA FLEX 241

BATCH: m103497

EXP DATE: 07/10

4-Coat all exposed fasteners with "LPS Procyon"

batch: m17168

FH/a.m 07/03/22 ①

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

Date: Wednesday, 1/31/2007 2:58:21 PM

User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY RH

Job Number: 30536

Part Number: D350636012

Job Number:



Seq. #:

Machine Or Operation:

Description :

29.0

AN3C5A

Bolt



Comment: Qty.: 38 Each(s)/Unit Total : 38 Each(s)

Bolt

Batch: m103641

30.0

AN3C6A

BOLT



Comment: Qty.: 4 Each(s)/Unit Total : 4 Each(s)

Bolt

Batch: m101418

31.0

AN3C7A

BOLT



Comment: Qty.: 4 Each(s)/Unit Total : 4 Each(s)

BOLT

Batch: m102254

32.0

AN6C44A

BOLT



Comment: Qty.: 4 Each(s)/Unit Total : 4 Each(s)

BOLT

Batch: m103692

33.0

AN8C35A

BOLT



Comment: Qty.: 1 Each(s)/Unit Total : 1 Each(s)

BOLT

Batch: m102180

34.0

AN960C10L

washer



Comment: Qty.: 46 Each(s)/Unit Total : 46 Each(s)

washer

Batch: m103691

35.0

AN960C816L

WASHER



Comment: Qty.: 2 Each(s)/Unit Total : 2 Each(s)

WASHER

Batch: m100186

FL/a.m

07/03/22

①

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

Date: Wednesday, 1/31/2007 2:58:21 PM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY RH

Job Number: 30536

Part Number: D350636012

Job Number:



Seq. #:

Machine Or Operation:

Description:

10-Deburr holes

Qty 14 07-03-06

14.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

07/03/06

15.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

07/03/06

16.0

POWDER COATING

POWDER COATING



Comment: POWDER COATING

Powder Coat Gloss White (Ref. 4.3.5.1) as per Dart QSI 005 4:3

FL/a.m

07/03/20 ①

17.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

Inspect for foreign object per QSI 024

m.l

07/03/22 ①

18.0

NAS1330S3KB166

INSERT



Comment: Qty.: 42 Each(s)/Unit Total: 42 Each(s)

INSERT

Batch:

m/103472 (x23)

m/103672 (x19)

19.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

1-Install inserts as per dwg D2750

FL/a.m

07/03/22 ①

20.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

Inspect Inserts

07/03/22 ①

21.0

D26483

Wearpad



Comment: Qty.: 5 Each(s)/Unit Total: 5 Each(s)

Wearpad

Batch:

B29777

FL/a.m

07/03/22 ①

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY RH

Job Number: 30536

Part Number: D350636012

Job Number:



Seq. #:

Machine Or Operation:

Description :

10.0

D34901

CROSS BOLT SPACER



Comment: Qty.: 4 Each(s)/Unit Total : 4 Each(s)

Crossbolt spacer

Batch:

B29981

BE 07-03-06

11.0

D34903

CROSS BOLT SPACER



Comment: Qty.: 4 Each(s)/Unit Total : 4 Each(s)

Crossbolt spacer

Batch:

B29982

BE 07-03-06

12.0

D2743

Crossbolt Spacer



Comment: Qty.: 8 Each(s)/Unit Total : 8 Each(s)

Crossbolt Spacer

Batch:

B29342

BE 07-03-06

13.0

LANDING GEAR 1

LANDING GEAR RESOURCE 1



Comment: LANDING GEAR RESOURCE 1

1-Open up holes of Detail V & Detail C to 0.625" (total of 8 holes per side)
as per dwg D2750.

Pm 07-03-020

2-Open up holes of Detail D to 0.750" (total of 4 holes per side)
as per dwg D2750.

Pm 07-03-020

3-Chamfer holes of Detail V, Detail C, Detail D and hole size "W" per dwg D2750 (welding instructions on
sheet 4)

Pm 07-03-020

4-Deburr and blow out all chips from inside of tube

Pm 07-03-020

5-Bond web D2739 in place as per QSI 015

A/R

Sikaflex-291

batch:

M103497

exp. date:

07-10-010

7- Weld spacers D3490-1, D3490-3 and D2743 as per dwg D2750 & QSI004
(welding instructions on sheet 4)

A/R

Aluminum Rod

batch:

M102756

BE 07-03-06

8-Grind welds flush as per Dwg D2750

Pm 07-03-06

9-Spot face ground handling holes section J-J (total of 4 places per side) as per dwg D2750

Pm 07-03-05

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: 350 SKIDTUBE ASSEMBLY RH

Job Number: 30536

Part Number: D350636012

Job Number:



Seq. #:

Machine Or Operation:

Description:

as per dwg D2750.

4-Drill pilot holes for Detail B using DT8330

PW/M 07-02-28

5-Open up holes for Detail B, "hole size W" and blade fitting location holes to 0.500" (total of 9 holes per side) as per dwg D2750.

PW/M 07-02-28

6-Drill pilot holes for wearplates as per Dwg D2750 using DT8108 and open to 0.250" ***Make sure that wearplate holes are on bottom of tube*****

PW/M 07-02-28

7-Open up holes of Detail A to 0.250" (total of 2 holes per side)

PW/M 07-02-28

8- Countersink all fwd wearshoe holes (total of 19 holes per side) DO NOT C'SINK THE LAST AFT HOLES (total of 2 per side for blade fitting) as per dwg D2750.

PW/M 07-02-28

9-Weld D2744 Cap as per Dwg D2750 and QSI 004. Fill grooves in bend left from bending as per QSI 004

A/R

Aluminum Rod

M102756 BE 07-02-28

10-Grind welds flush as per Dwg D2750

BE 07-03-01

11-Countersink Detail A as per dwg D2750.

BE 07-03-01

5.0

QC9

VISUAL WELDING INSPECTION



Comment: VISUAL WELDING INSPECTION

BE 07/03/01

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

BE 07/03/01

7.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

PW 07-03-01

8.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

BE 07-03-02

9.0

D2739

350 I Beam



Comment: Qty.: 1 Each(s)/Unit Total: 1 Each(s)

Web

Batch:

029997

PW 07-03-02

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
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Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
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| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
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NOTE: Date & initial all entries

Date: Wednesday, 1/31/2007 2:58:21 PM
 User: Kim Johnston

Process Sheet

| | |
|---|---|
| Customer : CU-DAR001 Dart Helicopters Services | Drawing Name : 350 SKIDTUBE ASSEMBLY RH |
| Job Number : 30536 | |
| Estimate Number : 10265 | |
| P.O. Number : N/A | Part Number : D350636012 |
| This Issue : 1/31/2007 S.O. No. : N/A | Drawing Number : D2750 |
| Prsht Rev. : NC | Project Number : N/A |
| First Issue : N/A | Drawing Revision : D |
| Previous Run : 30535 | Material : N/A |
| Written By : _____ | Due Date : 2/28/2007 Qty: 1 Um: Each |
| Checked & Approved By : <u>07.02.01</u> | |
| Comment : Est Rev: I 02.09.25 Rearranged procedure steps KJ | |
| Est Rev: J 06-03-29 As per Rev D EC | |
| Est Rev: J 06-07.13 As per dsi9343 EC | |

Additional Product

Job Number:



| | | |
|---------|-----------------------|---------------|
| Seq. #: | Machine Or Operation: | Description : |
|---------|-----------------------|---------------|

| | | |
|-----|----|------------------|
| 1.0 | DC | DOCUMENT CONTROL |
|-----|----|------------------|



Comment: DOCUMENT CONTROL

Photocopy blue file and type labels per PPP D350-636-012 CHG 002

KS 07-03-01

| | | |
|-----|------------|----------------|
| 2.0 | D26003BENT | Extrusion Bent |
|-----|------------|----------------|



Comment: Qty.: 1 Each(s)/Unit Total : 1 Each(s)

Pick:

| | | | |
|-----|--------------|------------------|---------|
| Qty | Part Number | Description | Batch |
| | D2600-3-Bent | Extrusion (Bent) | B 29327 |

| | | |
|-----|-------|---------|
| 3.0 | D2744 | Fwd Cap |
|-----|-------|---------|



Comment: Qty.: 1 Each(s)/Unit Total : 1 Each(s)

Cap

Batch: B 27559 BE 07-02-28

| | | |
|-----|----------------|-------------------------|
| 4.0 | LANDING GEAR 1 | LANDING GEAR RESOURCE 1 |
|-----|----------------|-------------------------|



Comment: LANDING GEAR RESOURCE 1

1- Mark cut line on aft end of D2600-3-Bent using Jig DT 8150. Cut to length as per Dwg D2750. Deburr end BE 07-02-27

2-Drill pilot holes as per Dwg D2750 sheet 3 (D2750-1 details). Drill using drill Jig DT8150 & DT8863 drilling holes labelled "A" only BE 07-02-27

3- Mark fwd end for cutting using Drill Jig DT 8150 & DT8863 and cut BE 07-02-27